ABSTRACT

A bit disparity monitor is disclosed in which a data stream is sub-sampled and logical 1's are detected in the sub-sampled stream. Within a predetermined period, the number of logical 1's is counted and the ratio of logical 1's to the number of bits is determined and compared to acceptable thresholds of bit disparity. In a second embodiment, the data stream is inverted and both the original data stream and the inverted data stream are sampled. The number of logical 1's detected in the sub-sampled original data stream and the number of logical 0's in the sub-sampled inverted data stream are correlated and mismatches, indicative of a transitional sample, are discarded before the bit disparity ratio is determined. Methods of comparing the bit disparity of a data stream to an acceptable threshold are also disclosed.